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AUTHOR	Phelps, Margaret S.; Peach, Larry E.; Reddick, Thomas L.
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ABSTRACT

Rural schools, in partnership with a solid base of supportive community citizens, can positively influence community vitality through expanded curricular and extracurricular offerings. This paper explores the ways in which rural communities can enhance education in their own towns. It discusses the characteristics of successful rural schools, which include having well-defined goals, a positive learning environment, high expectations for student performance, and adequate facilities and instructional materials. Further, the paper highlights the conditions necessary for student success, indicating that this is best controlled when schools are the right size, when there is documentation of achievement, and when school buildings are safe and in good condition. It argues that today's increasingly technological sophistication in education requires specialized spaces that match the educational goals of the activities for which these spaces will be used. Such specialized areas require enhanced infrastructure if they are to contribute to student learning. Schools in rural communities that are attractive and well-maintained, with quality curricular and extracurricular programming for all ages are investments in the community. (Contains 21 references.) (GR)

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MEETING FACILITY NEEDS IN RURAL SCHOOLS

BY

Margaret S. Phelps
Director of Rural Education
Professor of Rural Education

Larry E. Peach
Professor of Instructional Leadership

Thomas L. Reddick
Professor of Instructional Leadership

Tennessee Technological University
Cookeville, TN 38506

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Margaret S. Phelps

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MEETING FACILITY NEEDS IN RURAL SCHOOLS

The rural areas of our country account for more than one-fourth of our nation's population and most of our natural resources. Some 26.6 percent of all public school buildings are located in rural areas serving approximately 26.0 percent of the nation's public school children . Almost half (49.0 percent) of the 14,400 school districts in the nation serve fewer than 1,000 students (NCES, 1996). Rural schools traditionally are the focal points of their communities. In addition to providing general education programs, they serve as centers for extracurricular and community activities. The small, rural school is a resource for life-long learning and a means for delivering a wide range of educational and social services in smaller communities (Everson, 1994). Therefore, some rural communities in the United States struggle to maintain their small schools when governmental entities attempt to close small schools and create larger ones for the purpose of alleged cost-efficiency and curriculum breadth (DeYoung, 1995).

In the past, rural people were likely to move to urban areas in search of better or higher paying jobs. However, in many rural communities, the trend of emigration to immigration is reversing. A number of Americans are choosing to live and raise their children in a more traditional community environment, creating a "resettling of rural America"(Phelps, 1997). According to Gallagher (1998), the new American dream is to exit the corporate world for more satisfying work or a more relaxed lifestyle, perhaps in a "pastoral locale." This has resulted in rural and small schools experiencing growth in student population and the need to replace or renovate school structures. Quality educational opportunities make rural communities even more attractive to persons seeking relocation and provide rural citizens with choices for their futures. Advocates of rural education postulate that developing and sustaining collaborative partnerships

is necessary for community revitalization. Rural schools, in partnership with a solid support base of residents, can positively impact community vitality through expanded curricular and extracurricular offerings (Phelps, 1989).

Quality Rural Schools

Successful schools consistently exhibit certain discernible characteristics: clearly defined goals and objectives; a positive climate for learning; high expectations for student performance; competent leadership; a relevant curriculum; meaningful school-community partnerships; and adequate facilities and instructional materials . Community residents have a stronger sense of school ownership when they perceive it to be a "good" school . Recent national reports reinforce the growing perception that small schools are good schools (Howley, 1996).

A relevant issue in a discussion of curricula and extracurricular considerations in rural schools is that of school size. Researchers have not reached consensus on an optimal size for schools. However, research reported by Kathleen Cotton (1996) indicates that an effective size for an elementary school is in the range of three hundred to four hundred students and that four hundred to eight hundred students is ideal for a secondary school. She further noted that it is size rather than ruralness that contributes to the effective and social benefits of small rural schools. Sergiovanni (1993) views schools as communities rather than organizations. He thinks that learning is nurtured over time and is not simply a product to be attained. He posits that an enrollment of 300 is optimal to sustain a true educational community. A number of rural schools exceed the student enrollment recommended in the research by Cotton. Some of the benefits of smallness can be attained by creating learning communities within large schools (Cotton, 1996).

Craig Howley (1996) reported that when all factors are basically equal, comparisons of

schools and school districts based on differences in enrollment generally favor smaller units. Cotton (1996) suggested a number of reasons for the exceptional performance of students in small schools. This study indicated that there is more active involvement between the community and the small school. Students and school personnel know each other to a greater degree than is possible in a large school, and incidence of parental involvement is higher. Teachers and students seemed to have a stronger sense of personal involvement and participation in learning. Research on instructional practices in small, rural schools illustrates that teachers are more likely to develop teaching teams, work with multiage grouping, promote cooperative learning, and individualize performance assessments.

A community school is a resource for lifelong learning. Schools provide the focus for a wide range of services including school related activities and a center for community programs. This may include such services as using the school as a voting precinct; providing adult education offerings; holding community sports programs; locating rural library services in the school building; and holding agricultural activities, public forums, and other similar activities. Use of the school facilities by the public enhances public pride, encourages community participation, promotes parental involvement, and reduces vandalism of school property. A study by Sun, Hobbs, and Elder (1994) found that parental involvement is higher in rural areas than in urban communities. Even when parent participation is high, there continues to be challenges associated with providing comprehensive educational offerings in rural situations. Some of the challenges of small rural schools include the isolation of the community; limited job opportunities; the perceived value of education; lack of exposure to multicultural experiences; and the absence of school museums, art galleries, comprehensive libraries, and other such

benefits (Capper, 1993).

The condition, design, and serviceability of the school plant are crucial concerns in the process of serving student needs. Alternative instructional delivery models may enhance facility utilization. These might include such approaches as distance learning with other schools, higher education institutions, or vendors utilizing a variety of technologies. Additionally shared teachers, cooperative learning and transporting students to specialized classes may be meaningful to the delivery of instructional services. School facilities may be shared among schools and community groups through the coordination of scheduling.

Those planning new facilities must incorporate flexibility in the design of buildings. Plans should consider present, as well as, anticipated curriculum needs in enrollment growth. Buildings that do not accommodate existing programs should undergo renovation or new facilities must be provided. One may argue that most decisions regarding the construction, renovation, and closing of rural schools are based primarily on issues of population changes and costs of facilities. A primary purpose of school buildings should be to enhance instructional programs and extracurricular activities. Frequently, decisions which appear cost-effective in the short term evolve into major challenges for administrators, teachers, and students as they go about their daily tasks of teaching and learning.

The Appalachian Educational Laboratory created a "Rural School Facility Checklist" design to help school leaders analyze local facility needs.

- Educators, community members, and students work together to identify needs for any new construction or renovation.
- The location of new facilities encourages use by the community.
- New construction or renovation plans accommodate disabled persons in the community.
- The facility includes such areas as meeting rooms—separate from areas used by students—available to community members during the regular school day.
- The school helps provide the community with access to communications technology.

- The school helps meet the leisure, recreational, and wellness needs of the community.
- The school actively seeks opportunities to use the community as part of its curriculum.
- The learning resource center/library is designed with the community clearly in mind.
- The school is, or will be, small enough to serve its students and community well. (Harmon and others, 1997)

There are certain questions one should consider when developing criteria for determining school facility renovation or discontinuing the use of an existing building. They include:

- Is the school under consideration needed in its present location?
- Does the building have structural defects that cannot be corrected in a cost-effective manner?
- Is the school educationally obsolete?
- Is the facility safe for students, school personnel, and others who may use the facility?
- Does the facility accommodate extracurricular programs?
- Is the school site adequate for present usage and future growth?
- Is there adequate space in the facility for curriculum and program needs?

(Harmon and Others, 1997)

Answering these questions helps school personnel, policy makers, and other interested groups make sound decisions about providing adequate facilities that meet curriculum and extracurricular needs. A primary purpose of the school facility is to promote effective learning among students; i.e., a school that meets the academic, physical, psychological, and social needs of students and protects the health and safety of all participants.

The school plant and other facilities should support the educational program by providing space and configurations appropriate for their intended use. Each type of learning activity has different demands on learning spaces. Large group activities demand a spacious area suitable for multimedia presentations. Individualized activities need space for independent, self-directed work; small group needs are met in appropriately equipped areas. Spaces for experiential, student participation, hands-on learning may need special furnishings and equipment both for instruction and student safety (Council of Educational Facility Planners, International, 1996).

The Americans with Disabilities Act (ADA) requires that all schools provide access for

persons with physical disabilities. Frequently, renovations are initiated in an effort to provide access to building interiors through the construction of ramps, railings, movable seats on stairways, accessible water fountains and restrooms, automatic doors, doors wide enough for wheel chairs, and elevators. Laboratory classrooms need specialized modifications. All new facilities must be designed to meet ADA requirements including elevators for multi-story facilities.

Small rural schools face the challenge of providing diverse offerings to small groups of students. The delivery of specialized offerings requires schools to be willing to experiment with alternative delivery models. These might include such approaches as distance learning with other schools, higher education institutions, or vendors utilizing a variety of technologies; shared teachers; work-based learning; private support for some programming; articulated courses; or transportation of students to specialized classes.

A Rural Facility Research Study

Phelps, Peach, and Reddick (1998) conducted a survey regarding the relationships between facility conditions and curricular and extracurricular opportunities. The schools selected were identified from areas classified as rural by the Tennessee Rural Economic and Community Development Agency (1998). The sample of 75 schools represented elementary through high school grade levels. Enrollment ranged from 216 through 840. A total of sixty-two principals (83%) returned completed surveys. The study collected certain directorial information and focused on four open-ended questions:

- What characteristics of your facility are highly compatible with your curricular and extracurricular offerings?
- What characteristics of your facility limit your ability to provide desired curricular and extracurricular offerings?
- What construction/remodeling of your facility has been accomplished in the past five years in

response to program needs?

- What major facility modifications are needed to accommodate specific curricular or extracurricular needs?

The resulting data provide a profile of the present status of rural school facilities and their accommodation of various curricular and extracurricular offerings in a rural region. The region consists of a 20 county area with no urban centers. Interestingly, the region has three K-12 schools and approximately twelve elementary schools with fewer than 100 students. An analysis of the data from the survey forms follows in Table I.

Table I
Compatibility of Curricular and Extracurricular Offerings with Rural School Facilities

Number/Percent of Responses		Areas of Compatibility
55	89%	Appropriate Curriculum for Facility Safe Location; Positive School Climate
51	82%	Gymnasium, Music Rooms, Auditorium Central Location
49	79%	Technology Service; Computer Laboratory
47	76%	Internet Operable
44	71%	Science Laboratory
37	60%	Adequate Classroom Space Diverse Extracurricular Program
36	58%	Small Class Size (20 to 1)
33	53%	Clean Facilities Good Library/Learning Media Center
31	50%	Large Campus Areas; School Site
26	42%	Vocational, Career, Technical Programs
21	34%	Community Use Athletic Fields; Band Practice Area
18	29%	State of Maintenance
17	27%	Team Teaching; Classroom Pods; Open Space

The principals indicated the level of compatibility of the curricular and extracurricular offerings with their schools' facilities was generally positive. Class size is usually a matter of

concern, but 58 percent reported they enjoyed a class size of 20 students to one teacher or, in some cases even less students per teacher. However, this indicates that 42 percent had larger class sizes and possibly crowded conditions in their schools. The high rating of internet reflects the culmination of a two-year struggle to bring all schools in the state on-line. There were several areas of high compatibility. These include a safe school environment and positive climate, an important characteristic for effective schools. Other highly favorable areas were technology, meaningful extracurricular activities, satisfaction with curriculum offerings, and school location.

Table II
Limitations of Facilities in Providing
Curricular and Extracurricular Offerings

Number/Percent of Responses		Areas of Limitations
41	66%	Poor Maintenance
36	58%	Overcrowded Classrooms Inadequate Number of Classrooms Lack of Space for Extra Activities
32	52%	Lack of Instructional Materials, Supplies
31	50%	Site Too Small
29	47%	Inadequate Library/Learning Media Center
28	45%	Lack of Science Laboratory
27	44%	Lack of Adequate Computer Laboratory Inadequate Wiring/Technology
23	37%	Inadequate Number of Teachers/Personnel
21	34%	Lack of /Limited Art and Music Space
18	29%	Gymnasium Too Small
14	23%	Rural Location
12	19%	Inadequate Building Infrastructure/ Topography
6	10%	Lack of Parking Inadequate Safety Features/Fire Codes Violations

Although there were a number of areas in which positive responses were given, Table II provides information about the limitations of existing facilities that restrict programs and services. Lack of space and over-crowded classrooms are a problem. In some of the older buildings, wiring and other infrastructure cause concern and limit optimal utilization of technology. Science laboratories, computer laboratories, and learning media centers need major improvement. Also, over one-half of the respondents cited the shortage of instructional equipment and materials. Interestingly, inadequate maintenance was mentioned in both Tables I and II. The care and upkeep of buildings are critical to the curriculum and optimum facility utilization. A well-equipped facility, aesthetically pleasing, and adequately maintained enhances the curriculum, is motivational to students and school personnel, and projects a positive image to the community.

Table III
Construction or Renovation of Rural Facilities
1993-98

Number/Percent of Responses		Areas of Limitations
46	74%	Major Remodeling Projects
38	61%	Classrooms Constructed
31	50%	New Equipment for Extracurricular/ Community Programs
24	39%	New Facilities Planned
21	34%	Wiring Improved
20	32%	Minor Remodeling Projects
16	26%	Improvements to Security Systems
15	24%	Added Portable Classrooms
14	23%	No Changes to Facilities
12	19%	Roof Replaced/Major Repairs New Facilities Constructed
11	18%	Gymnasium Improved Parking Areas Improved
9	15%	Improvement to Band/Music/Art Facilities
8	13%	Change of Grade Structure

Construction or renovation of school facilities during the past five years is presented in

Table III. In the last five years, the condition of rural school facilities received considerable attention. About 40 percent of the principals said that new facilities were in the planning stages and about 20 percent of the sixty-two schools had new facilities constructed. Gene Thurman (1998), a former school superintendent now directing marketing of school-based projects for an architectural firm in Tennessee, reported that approximately one half of the 137 school districts in Tennessee are involved in some phase of facility improvement. Renovation and retrofitting to allow increased technology implementation is occurring in most of the schools. The level of activity in Tennessee is consistent with nation-wide trends. The American School & University's 23rd annual Official Education Construction report showed that 1996 was a record year for new school construction and renovation projects with a total exceeding18 billion dollars nation-wide.

Table IV
Construction Features in New and Remodeled
Rural School Facilities 1993 –1998

Features	New Construction		Major Renovations		Minor Renovations	
	#	%	#	%	#	%
Art Rooms	12	100%	11	24%	3	15%
Auditoriums	12	100%	8	17%	6	30%
Computer Centers	12	100%	31	67%	14	20%
Gymnasiums	12	100%	28	61%	10	50%
Language Labs	12	100%	9	20%	3	15%
Library/Media	12	100%	30	65%	13	65%
Music Rooms	12	100%	16	35%	6	30%
Outdoor Athletic Areas	12	100%	34	74%	16	80%
Parking Lots	12	100%	19	41%	6	30%
Science Labs	12	100%	15	33%	4	20%
Tennis Courts	12	100%	6	13%	2	10%
Swimming Pools	1	8%*	--		--	
TOTAL SCHOOLS**	**12**		**46**		**20**	

*Proposed

**Some schools had projects in two or more categories.

Construction features reported by the 62 rural school principals in the Phelps, Peach, and Reddick study (1998) during the past five years (1993-94 through 1997-98 school years) are summarized in Table IV. Twelve principals moved into new school facilities each of which had all of the 11 features listed in the table. Major renovations (projects costing $5,000.00 or more) were completed in 46 schools. Improvements listed frequently included projects such as outdoor athletic areas, renovated computer centers, library and media complexes, and changes in gymnasiums. Minor renovations (projects costing less than $5,000.00) included changes in outdoor athletic fields, computer centers, and library and media areas. Several respondents reported improvements in music and art facilities.

The principals provided a list of facilities needs to accommodate future curricular and extracurricular offerings. The list is provided in alphabetical order to keep from implying a priority listing. This list agrees with the data in Tables II and IV.

Additional Classroom Space
Additional Remodeling
Art Laboratories
Auditorium/Theater
Computer Laboratories and Upgrades
Heating/Cooling Improvements
Language Laboratories
Library/Learning Media Center
Playground Space and Equipment
Teacher Workspace
Additional Extracurricular Opportunities
Additional Specialized Personnel
Appropriate Storage Areas
Community Education Programs
Dressing Rooms for School Events
Career/Vocational/Technical Programs
Laboratories for Science
New Buildings
Student Lockers/Commons Areas
Wiring for Technology

Summary

Rural school facilities are more than buildings. They are instructional tools which facilitate the delivery of quality educational programming; focal points of community life; and the strongest link between schools and communities. While generic classrooms equipped with desks and chalkboards once sufficed for most educational programs, the

technological dependence and increasing sophistication of curricular content require specialized spaces which match the educational goals of the activities for which these spaces will be used. These specialized spaces require enhanced infrastructure (plumbing, electrical, electronic) if they are to contribute to, rather than hamper, student learning. In order to justify the expense of construction or major renovation of rural school facilities to accommodate emerging curricular and extracurricular offerings, a strong case must be made for retaining smaller schools which serve defined rural areas rather than consolidating multiple facilities into one facility. The reversing population dynamics evidenced by overcrowded rural schools assist one in making the argument to renovate or rebuild on existing sites. However, in the opinion of the authors, decision- makers cannot jeopardize the future of rural youth by maintaining small rural schools that do not accommodate instructional technology, specialized curricular areas, and diverse extracurricular offerings.

Rural school facilities that are unsafe, unclean, and incompatible with curricular expectations of the 21st century testify that those communities may not properly value an education for their youth. Rural communities must be willing to work collaboratively to provide school facilities that meet emerging educational needs of the entire population (pre-school through adult) or accept the inevitability of facilities consolidation. If small rural schools are educationally adequate and supported by the entire community, then there is no impetus to consolidate. Given the costs of educational adequacy in the 21st century, communities must use innovative approaches to program delivery if they wish to preserve, for acceptable costs, all that is good about small rural schools. Attractive, well-

maintained, rural schools with quality curricular and extracurricular programming for all ages are investments in community. An attractive, modern building is not a quality school; curricular and extracurricular offerings determine educational quality. However, providing educational quality in out-dated facilities is difficult, if not impossible. Communities that can truthfully boast about their schools are attractive to persons and companies seeking relocation in traditional communities. These new residents add to the local tax base, provide additional employment opportunities for local residents, and add to the cultural diversity of the community. In turn, schools (and communities) will benefit from increased funding, economic vitality and opportunity, and human resources that enhance school programs.

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